RAW SEQUENCE LISTING
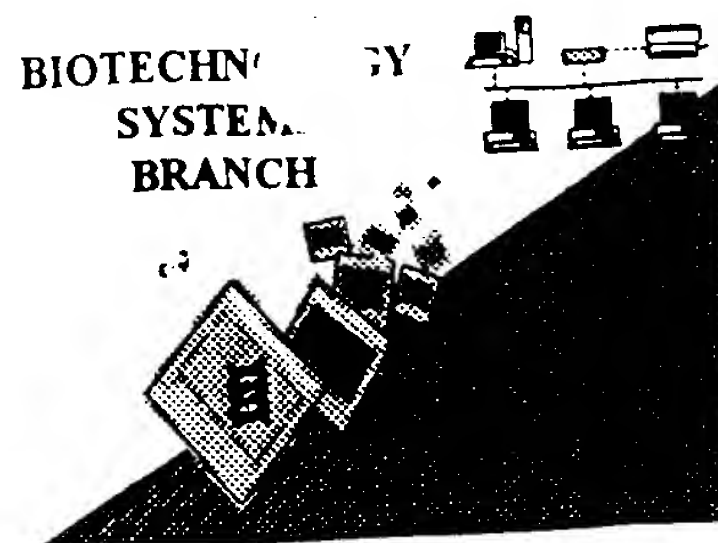# ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/831,047_

Source: _Pur/09_

Date Processed by STIC: _5/21/2001_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

ERROR DETECTED   **SUGGESTED CORRECTION**   SERIAL NUMBER: _09/83/647_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics   The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
    Wrapped Aminos   was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will
    prevent "wrapping."

2 ____ Invalid Line Length   The rules require that a line **not exceed** 72 characters in length. This includes white spaces.

3 ____ Misaligned Amino   The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers;
    Numbering   use **space characters**, instead.

4 ____ Non-ASCII   The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please
    ensure your subsequent submission is saved in ASCII text.**

5 ____ Variable Length   Sequence(s) ____ contain n's or Xaa's representing more than one residue. **Per Sequence Rules,
    each n or Xaa can only represent a single residue.** Please present the **maximum** number of each
    residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ____ PatentIn 2.0   A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
    "bug"   sequences(s) _____. Normally, PatentIn would automatically generate this section from the
    previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
    the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for
    Artificial or Unknown sequences.**

7 ____ Skipped Sequences   Sequence(s) ____ missing. If intentional, please insert the following lines for **each** skipped sequence:
    (OLD RULES)   (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
    (i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
    (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
    This sequence is intentionally skipped

    Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

8 ____ Skipped Sequences   Sequence(s) ____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
    (NEW RULES)   <210> sequence id number
    <400> sequence id number
    000

9 ____ Use of n's or Xaa's   Use of n's and/or Xaa's have been detected in the Sequence Listing.
    (NEW RULES)   Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
    In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.

10 ____ Invalid <213>   Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or
    Response   scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or
    is Artificial Sequence

11 ____ Use of <220>   Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
    Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
    "Unknown." Please explain source of genetic material in <220> to <223> section.
    (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12 ____ PatentIn 2.0   Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
    "bug"   resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
    listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

PCT

g. 6

```
  4 <110> APPLICANT: The Wistar Institute of Anatomy and Biology
  5        The Trustees of the University of Pennsylvania
  6        Blaszczyk-Thurin, Magdalena
  7        Kieber-Emmons, Thomas
  9 <120> TITLE OF INVENTION: Compositions and Methods For Treatment of Cancer
 11 <130> FILE REFERENCE: WST93PCT
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/831,047
C--> 14 <141> CURRENT FILING DATE: 2001-05-03
 16 <150> PRIOR APPLICATION NUMBER: 60/107,478
 17 <151> PRIOR FILING DATE: 1998-11-06
 19 <160> NUMBER OF SEQ ID NOS: 121
 21 <170> SOFTWARE: PatentIn Ver. 2.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 12
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Artificial Sequence
 28 <220> FEATURE:
 29 <223> OTHER INFORMATION: Description of Artificial Sequence:
 30        peptido-mimetic of a Lewis antigen
 32 <400> SEQUENCE: 1
 33 Asp Leu Trp Asp Trp Val Val Gly Lys Pro Ala Gly
 34    1               5                  10
 37 <210> SEQ ID NO: 2
 38 <211> LENGTH: 12
 39 <212> TYPE: PRT
 40 <213> ORGANISM: Artificial Sequence
 42 <220> FEATURE:
 43 <223> OTHER INFORMATION: Description of Artificial Sequence:
 44        peptido-mimetic of a Lewis antigen
 46 <400> SEQUENCE: 2
 47 Asp Ala Trp Asp Trp Val Val Gly Lys Pro Ala Gly
 48    1               5                  10
 51 <210> SEQ ID NO: 3
 52 <211> LENGTH: 12
 53 <212> TYPE: PRT
 54 <213> ORGANISM: Artificial Sequence
 56 <220> FEATURE:
 57 <223> OTHER INFORMATION: Description of Artificial Sequence:
 58        peptido-mimetic of a Lewis antigen
 60 <400> SEQUENCE: 3
 61 Asp Asp Trp Asp Trp Val Val Gly Lys Pro Ala Gly
 62    1               5                  10
 65 <210> SEQ ID NO: 4
 66 <211> LENGTH: 12
 67 <212> TYPE: PRT
 68 <213> ORGANISM: Artificial Sequence
 70 <220> FEATURE:
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/831,047

DATE: 05/21/2001
TIME: 08:40:08

Input Set : **A:\sequencelst.txt**
Output Set: N:\CRF3\05212001\I831047.raw

```
71 <223> OTHER INFORMATION: Description of Artificial Sequence:
72       peptido-mimetic of a Lewis antigen
74 <400> SEQUENCE: 4
75 Asp Tyr Trp Asp Trp Val Val Gly Lys Pro Ala Gly
76    1           5                 10
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 12
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence:
86       peptido-mimetic of a Lewis antigen
88 <400> SEQUENCE: 5
89 Asp Glu Trp Asp Trp Val Val Gly Lys Pro Ala Gly
90    1           5                 10
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 12
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Description of Artificial Sequence:
100       peptido-mimetic of a Lewis antigen
102 <400> SEQUENCE: 6
103 Asp Lys Trp Asp Trp Val Val Gly Lys Pro Ala Gly
104    1           5                 10
107 <210> SEQ ID NO: 7
108 <211> LENGTH: 12
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: Description of Artificial Sequence:
114       peptido-mimetic of a Lewis antigen
116 <400> SEQUENCE: 7
117 Asp Arg Trp Asp Trp Val Val Gly Lys Pro Ala Gly
118    1           5                 10
121 <210> SEQ ID NO: 8
122 <211> LENGTH: 12
123 <212> TYPE: PRT
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Description of Artificial Sequence:
128       peptido-mimetic of a Lewis antigen
130 <400> SEQUENCE: 8
131 Asp Ser Trp Asp Trp Val Val Gly Lys Pro Ala Gly
132    1           5                 10
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 12
137 <212> TYPE: PRT
138 <213> ORGANISM: Artificial Sequence
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140 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence:
142      peptido-mimetic of a Lewis antigen
144 <400> SEQUENCE: 9
145 Asp Leu His Asp Trp Val Val Gly Lys Pro Ala Gly
146   1           5                   10
149 <210> SEQ ID NO: 10
150 <211> LENGTH: 12
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Description of Artificial Sequence:
156      peptido-mimetic of a Lewis antigen
158 <400> SEQUENCE: 10
159 Asp Leu Tyr Asp Trp Val Val Gly Lys Pro Ala Gly
160   1           5                   10
163 <210> SEQ ID NO: 11
164 <211> LENGTH: 12
165 <212> TYPE: PRT
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Description of Artificial Sequence:
170      peptido-mimetic of a Lewis antigen
172 <400> SEQUENCE: 11
173 Asp Leu Phe Asp Trp Val Val Gly Lys Pro Ala Gly
174   1           5                   10
177 <210> SEQ ID NO: 12
178 <211> LENGTH: 12
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Description of Artificial Sequence:
184      peptido-mimetic of a Lewis antigen
186 <400> SEQUENCE: 12
187 Asp Leu Met Asp Trp Val Val Gly Lys Pro Ala Gly
188   1           5                   10
191 <210> SEQ ID NO: 13
192 <211> LENGTH: 12
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence:
198      peptido-mimetic of a Lewis antigen
200 <400> SEQUENCE: 13
201 Asp Leu Ala Asp Trp Val Val Gly Lys Pro Ala Gly
202   1           5                   10
205 <210> SEQ ID NO: 14
206 <211> LENGTH: 12
207 <212> TYPE: PRT
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Input Set : A:\sequencelst.txt
Output Set: N:\CRF3\05212001\I831047.raw

208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence:
212   peptido-mimetic of a Lewis antigen
214 <400> SEQUENCE: 14
215 Asp Leu Glu Asp Trp Val Val Gly Lys Pro Ala Gly
216   1   5   10
219 <210> SEQ ID NO: 15
220 <211> LENGTH: 12
221 <212> TYPE: PRT
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence:
226   peptido-mimetic of a Lewis antigen
228 <400> SEQUENCE: 15
229 Asp Leu Asp Asp Trp Val Val Gly Lys Pro Ala Gly
230   1   5   10
233 <210> SEQ ID NO: 16
234 <211> LENGTH: 12
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence:
240   peptido-mimetic of a Lewis antigen
242 <400> SEQUENCE: 16
243 Asp Leu Lys Asp Trp Val Val Gly Lys Pro Ala Gly
244   1   5   10
247 <210> SEQ ID NO: 17
248 <211> LENGTH: 12
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Description of Artificial Sequence:
254   peptido-mimetic of a Lewis antigen
256 <400> SEQUENCE: 17
257 Asp Leu Arg Asp Trp Val Val Gly Lys Pro Ala Gly
258   1   5   10
261 <210> SEQ ID NO: 18
262 <211> LENGTH: 12
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence:
268   peptido-mimetic of a Lewis antigen
270 <400> SEQUENCE: 18
271 Asp Leu Ser Asp Trp Val Val Gly Lys Pro Ala Gly
272   1   5   10
275 <210> SEQ ID NO: 19
276 <211> LENGTH: 12

277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence:
282   peptido-mimetic of a Lewis antigen
284 <400> SEQUENCE: 19
285 Asp Leu Trp Glu Trp Val Val Gly Lys Pro Ala Gly
286   1   5   10
289 <210> SEQ ID NO: 20
290 <211> LENGTH: 12
291 <212> TYPE: PRT
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence:
296   peptido-mimetic of a Lewis antigen
298 <400> SEQUENCE: 20
299 Asp Leu Trp Ser Trp Val Val Gly Lys Pro Ala Gly
300   1   5   10
303 <210> SEQ ID NO: 21
304 <211> LENGTH: 12
305 <212> TYPE: PRT
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence:
310   peptido-mimetic of a Lewis antigen
312 <400> SEQUENCE: 21
313 Asp Leu Trp Pro Trp Val Val Gly Lys Pro Ala Gly
314   1   5   10
317 <210> SEQ ID NO: 22
318 <211> LENGTH: 12
319 <212> TYPE: PRT
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Description of Artificial Sequence:
324   peptido-mimetic of a Lewis antigen
326 <400> SEQUENCE: 22
327 Asp Leu Trp Val Trp Val Val Gly Lys Pro Ala Gly
328   1   5   10
331 <210> SEQ ID NO: 23
332 <211> LENGTH: 12
333 <212> TYPE: PRT
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Description of Artificial Sequence:
338   peptido-mimetic of a Lewis antigen
340 <400> SEQUENCE: 23
341 Asp Leu Trp Met Trp Val Val Gly Lys Pro Ala Gly
342   1   5   10
345 <210> SEQ ID NO: 24

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<210> 100
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      peptido-mimetic of a Lewis antigen

<400> 100
Asn Leu Arg Pro Lys Tyr Ile Xaa Leu Asp Ala Asp
1               5               10
```

All item 9 on Error Summary Sheet

FYI

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220> to
<223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/831,047

DATE: 05/21/2001
TIME: 08:40:09

Input Set : A:\sequencelst.txt
Output Set: N:\CRF3\05212001\I831047.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1419 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:100
L:1419 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:100
L:1419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:1573 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:111
L:1573 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:111
L:1573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:1587 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:112
L:1587 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:112
L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112